#### REMARKS

Reconsideration and allowance are respectfully requested in view of the following remarks.

By this amendment, claims 1, 2, 4, 14, 19, 25, 26, 29, 61 and 72 are amended. No new matter has been added. Accordingly, claims 1-76 are pending in the present application.

#### **Formal Matter**

The Office Action provides that a certified copy is filed in parent Application No. 10/516,736, filed on December 6, 2004. Applicant submits that such information is inaccurate.

The present application is a national stage entry of PCT/CN03/00441, filed on June 5, 2003, claiming priority of Chinese Patent Application Number 02120916.2, filed on June 5, 2002. A certified copy of the foreign priority application was filed in this application on December 6, 2004. Applicant requests the Examiner to acknowledge the certified copy of the foreign priority application filed in the present application.

## **Allowable Subject Matter**

Claims 4-59 contain allowable subject matter, but are objected to as being dependent upon a rejected base claim.

Claim 4 has been rewritten into independent form. Accordingly, claim 4 and its dependent claims 5-13 are now in condition for allowance. Claims 14-59 are

allowable at least because of their dependency from claim 1, which is believed to be patentable.

# Claim Objection

Claims 14 and 18 are objected to for informalities. In addition, the Office Action asserts that the word parts appears to be missing after the word remaining in the phrase "the first code of its radical and the last code of its remaining" recited in claim 28<sup>1</sup>.

Claims 14, 18 and 28 have been amended, for clarification, to address each of the Examiner's concerns. Accordingly, it is respectfully requested that the claim objection be withdrawn.

# Claim Rejection Under 35 U.S.C. § 112

Claim 61 is rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite.

Claim 61 has been amended, for clarification, to address each of the Examiner's concerns. Accordingly, it is respectfully requested that the rejection of claim 61 under 35 U.S.C. §112, second paragraph, be withdrawn.

#### Claim Rejection Under 35 U.S.C. § 102

Claims 1 and 70 are rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Yu (U.S. Patent No. 5,790,055, hereinafter "Yu"). The rejection is respectfully traversed. This rejection is traversed as follows.

<sup>&</sup>lt;sup>1</sup> Applicant submits that the phrase "the first code of its radical and the last code of its remaining" is recited in claim 29, instead of claim 28.

Claim 1 has been amended, for clarification, to recite an encoding and input method of world characters, used in a computer device for encoding and inputting the world characters, said computer device comprising a numerical keypad and a space key arranged proximal to the numerical keypad; said method comprises the steps of, *inter alia*,

for each category of world characters, allocating basic elements forming the character of this category or capable of determining the character of this category to the corresponding number keys on the numerical pad, the code of said each basic element is uniquely determined by area code and position code, where said area code is the number of the key at which the element is located, said position code is the position number in the number keys to which the basic element pertains;

inputting a code of the character or the word based on the arranged codes using the numerical keypad and the space key proximal to the numerical keypad.

According to the prior art, a space key is arranged together with the alphabet keys on the keyboards.

In contrast, according to Applicant's exemplary embodiments, a space key is placed together with the numeric keys, as illustrated in Fig. 29 of the present application, so as to expedite the speed of inputting characters.

Yu does not disclose such an arrangement of the space key and the numerical keys, or inputting a code of a character using the numerical keys and the space key proximal to the numerical keypad. Accordingly, claim 1 is patentable.

In numbered paragraph 20 of the Office Action, the Examiner recommended clarifying how the basic element(s) is/are mapped to a specific area of a numeric keyboard. Applicant submits that independent claim 1 recites "allocating basic elements forming the character of this category or capable of determining the

character of this category to the corresponding number keys on the numerical pad, the code of said each basic element is uniquely determined by area code and position code, where said area code is the number of the key at which the element is located, said position code is the position number in the number keys to which the basic element pertains." Examples of mapping between basic elements of characters and the numerical keys 0-9 can be found in at least page 28 and 32-34 of the specification, and Figs. 5-23 of the present application. Applicant submits that the scope of claim 1 is not limited by the examples provided here.

As such, claim 1 already explicitly recites that basic elements are mapped to area codes (e.g., 0-9 of the numerical keypad) and position codes. How the basic elements are mapped to the numeric keys is not part of the claim, and should not be treated as a further limit to the scope of the claim. Accordingly, claim 1 should not be required to describe how the basic element(s) is/are mapped to a specific area of a numeric keyboard.

Claim 70 is patentable at least because of its dependency from claim 1.

## Claim Rejections Under 35 U.S.C. § 103

Claim 2 is rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Yu in view of Liang (U.S. Patent Application Publication No. 20020173335 A1, hereinafter "Liang"). This rejection is traversed as follows.

Claim 2 is dependent from claim 1, and additionally recites that "said world characters are classified into block characters, linear characters, hybrid characters, punctuations and symbols."

According to Applicant's exemplary embodiments, using area code and position code to specify basic elements of block characters allows more than one basic element of block characters to be assigned to a specific numerical key. Referring to page 14 of the specification, in the paragraph under the subtitle the coding of "3-stroke combination," examples of assigning multiple 3-stroke combinations to each of the numerical keys 0-9 are provided. Applicant submits that the present invention is not limited to the exemplary embodiments.

Yu fails to disclose the above-recited features of claim 2. In Yu, each of ten Geo-Strokes is assigned to a numeric digit (0-9), as illustrated in Fig. 1. Even though a Geo-Stroke might include more than one stroke, Yu, however, does not disclose that the strokes included in a Geo-Stroke is specified by a numerical key and a position code of a numerical key.

Liang discloses using two digital codes to represent alphabet letters.

Referring to Fig. 1 of Liang, which illustrates a numerical keypad used for inputting letters, A is represented by 45, B is represented by 86, and so on. Liang, however, does not disclose that the two digital codes are used to represent basis elements forming block characters, linear characters, hybrid characters, punctuations or symbols.

Therefore, Yu and Liang, whether considered individually or in combination, fail to disclose a method of inputting block characters that includes "allocating basic elements forming the character of this category or capable of determining the character of this category to the corresponding number keys on the numerical pad, the code of said each basic element is uniquely determined by area code and position code, where said area code is the number of the key at which the element is

located, said position code is the position number in the number keys to which the basic element pertains," as recited in claim 1, wherein the world characters are classified into block characters, linear characters, hybrid characters, punctuations and symbols, as recited in claim 2.

Accordingly, claim 2 is patentable.

Claim 3 is rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Yu in view of Liang, and further in view of Tse-Kai (U.S. Patent No. 4,868,913, hereinafter "Tse-Kai").

Claim 61 is rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Yu in view of Change et al (U.S. Patent No. 6,389,166 B1, hereinafter "Chang").

Claim 62 is rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Yu in view of Chang, and further in view of Tse-Kai.

Claim 63 is rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Yu.

Claim 64 is rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Yu in view of Chang, and further in view of Hon et al (U.S. Patent No. 6,490,563, hereinafter "Hon").

Claim 65 is rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Yu in view of Chang, and further in view of Zhang et al. (U.S. Patent No. 5,197,810, hereinafter "Zhang"), and further in view of Hon.

Claims 66-69, 75 and 76 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Yu in view of Leung et al. (U.S. Patent No. 6,922,811, hereinafter "Leung").

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Claims 71-73 are rejected under 35 U.S.C. §103(a) as allegedly being

unpatentable over Yu, in further view of Geschwinde et al. ("PostgreSQL Developer's

Handbook," hereinafter "Geschwinde").

Claim 74 is rejected under 35 U.S.C. §103(a) as allegedly being unpatentable

over Yu in view of Tse-Kai.

None of the additional references cited remedies the deficiencies of the Yu

reference or the Liang reference. Therefore, claims 61-69 and 71-76 are patentable.

CONCLUSION

From the foregoing, further and favorable action in the form of a Notice of

Allowance is respectfully requested and such action is earnestly solicited.

In the event that there are any questions concerning this amendment, or the

application in general, the Examiner is respectfully requested to telephone the

undersigned so that prosecution of present application may be expedited.

Respectfully submitted,

**BUCHANAN INGERSOLL & ROONEY PC** 

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